FOURTH LIST OF BIRDS PRINCIPALLY FROM THE NAGA HILLS AND MUNIPUR, INCLUDING OTHERS FROM THE KHASI, GARO, AND TIPPERAH HILLS.—
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(With Plates IV—X). (Read May 6th, 1874).

In adverting to the hope expressed in my former papers, that the lists of birds from the N. E. frontier might be added to by members of the Survey Party; I have to thank several members of it for the aid they afforded, and especially are my thanks due to Mr. Wm. Robert, who was working during the field season of 1872-73 in the Garo Hills.

I must remind all connected with these survey operations that as they penetrate to the eastward, no finer field for ornithological research can be now found in India, as is shewn by the many beautiful new forms, that I was fortunate enough to obtain during my visit to the Naga Hills and Munipur in the winter of 1872-73. Ten of these have been described by me in the P. Z. S., one in the 'Annals and Magazine of Natural History,' and Mr. Gould has described one in the 'Birds of Asia.' I have introduced these descriptions again to render the paper of more use to ornithologists in India, into whose hands it is likely to fall.

This fourth list contains 112 species, which with 380 before recorded brings the number collected up to 492.

I have adhered to my former resolve not to bring into the list any bird which has not been actually bagged, the record of species seen on the wing, especially of the smaller duller birds, not being of any real value. Thus some very common forms are still absent. A few corrections have to be made in my former lists and some further detail is necessary regarding two or three birds that were brought into List No. 3, which was prepared somewhat hastily. I supply figures of seven of the new species, which will go some way, I trust, towards counterbalancing the imperfections which the paper may contain.

In the determination of the species, I have received very cordial assistance from Lord Walden, whose fine collection from British India and Malayana aided most materially. In expressing thanks for assistance afforded, I must also include the name of Mr. R. B. Sharpe, in charge of the ornithological branch at the British Museum, who was always ready to place his time and the collection at my disposal.

20.* HIERAX EUTOLMOS, Hodg.

Garo Hills. Appears never to be a common bird anywhere. I received two skins from the above hills, where it was obtained by Mr. Wm. Robert. I never saw it on the east of the Khasi Hills, where it appears to be replaced by *H. melanoleucos*, Blyth. Their habits are Shrike-like; they sit on isolated dead trees in the forest clearings and sally off from time to time to seize some insect.

37. LIMNAETUS KIENIERII, De Sparre.

This rare and handsome Hawk Eagle was obtained for me by Mr. W. Robert of the Topographical Survey in the Naga Hills during the cold season.

Length of wing 15.75," tail 10," tarsus 3.95," bill from gape 1.5." There is a fine specimen set up in the British Museum. Rare everywhere it appears to have a great range.

56a. MILVUS MELANOTIS, Tem. and Schl.

I obtained this species in February in the Munipur valley; but it was not numerous.

80. GLAUCIDIUM BRODIÆI, Burton.

Naga Hills. This bird is not common in these hills; its monotonous call at night is not so often heard as about Mussoorie in the N. W. Provinces.

82a. HIRUNDO CAHIRICA, Sav. = HIRUNDO TYTLERI, Jerdon.

My specimens from Munipur are evidently identical with Jerdon's bird observed at Dacca in June, it was the only form in Munipur in February and March, and very numerous at Imphal the capital; it was then commencing to breed. Darjeeling specimens in the collection of Lord Walden are still more like *Cahirica* from Egypt.

†W. 4.6," T. 3.4, t". 0.4," Bf. 0.3."

Hirundo gutturalis, Scop. is the form I obtained in the Naga Hills at about 5000 feet in January and February, and recorded from the Khasi Hills as H. rustica in my first list. Specimen from Naga Hills measures, W. 4.5," T. 4.3," t. 0.45," Bf. 0 3." At Shillong I did not notice them in any number until about July.

^{*} The numbers refer to those in "Jerdon's Birds of India."

[†] Throughout this paper L. stands for Length, W. Wing, T. tail, t. tarsus, Bf. bill at front, Bg. bill at gape.

100a. Cypselus subfurcatus, Blyth.

This is, I think, the first record of the occurrence of this species within the Indian area. I observed a few pairs in June breeding in the cliffs that overhang the falls of the "Umkrau" at Shillong. They were not easy to obtain, and the first I shot fell into grass so far down that it was never found; however, a day or two after I secured one, and after this they soon left the place. I could not get at the nests. My specimen agrees with those from Amoy and Malacca in Lord Walden's collection.

Wing, 5.1," t. 0.5," bf. 0.23." It will probably be found in all similar deep valleys with precipitous sides that occur in the Khási hills.

108a. CAPRIMULGUS JOTAKA, Q, Schlegel.

I shot this bird near the Umshirpi falls on the 29th May. It got up off the path and immediately settled again about 10 yards off on the open path, on again putting it up it did the same. Captain Badgley, who was walking behind me, called out that he had found the eggs. I then put the bird up a third time and brought her down. The eggs were laid close in under the rock on side of the path lying on the bare ground with no signs of any thing in the way of preparation for them or the young. The two eggs are of a dull white, blotched with three shades of umber and one shade of ashy brown: in the one they are distributed pretty evenly throughout and this is symmetrical in form, the minor axis being in the centre of the length: in the other the markings are mostly confined to the larger end and the shape is rounder:

1st. major axis 1·22, minor axis 0·88."
2nd. "1·19," "10·91."

Another \mathcal{P} was obtained by me near the village of Sopvomah in the Naga Hills, in January, at an elevation of 5000 feet, which, Lord Walden tells me, is identical with Japanese and Burmese individuals.

Caprimulgus is a common bird at Shillong during May and part of June, after which I did not hear their chukking noise so often, and at the time I started for Calcutta in August, they had apparently left the vicinity of the station owing probably to the increased rain-fall.

114. CAPRIMULGUS MONTICOLUS, Franklin.

From the Garo Hills. W. 7.55," T. 4.85," t. 0.83."

122. NYCTIORNIS ATHERTONI, Jard. and Selby. Garo and Naga Hills.

126. Eurystomus orientalis, Lin.

This beautiful Roller is essentially a forest bird and was seen on several occasions on the Dunsiri. They frequented the trees that surround the large tanks at Dimapur, and I shot my specimens there.

140. Homraius bicornis, Lin.

Several fine specimens were brought in by Captain Badgley and Mr. Chennell from the Tipperah Hills. In the Naga Hills I observed four large Hornbills, which I believe were this species, near Tellizo Peak, in January,—the only Hornbills seen in that part of the hills, no fruit then being ripe. In the low Dunsiri forest, at that season of the year, Hornbills are very numerous.

The Tipperah birds were very fine, their dimensions greatly exceeding those given in Jerdon's 'Birds of India;' the largest measured as follows:

Wing 21.5," tail 19.0," tarsus, 3.0"

| Length of bill along commissure to gape, | 12.0" |
|--|-----------|
| Bill in a straight line from point to gape, | |
| Length of bill over culmen to posterior of casque, | |
| Depth of bill at centre of casque (highest part), | 4.5'' |
| Length of casque, | 7.0" |
| Breadth of casque at base, | 3.68" |

Orange pink above, pinkish yellow on side of upper mandible and very red at the point; the lower is wax-yellow.

156. Picus cathpharius, Hodgson.

One specimen was got in the Nágá Hills in the rather open country near Sikhami.

¿ Description. Upper parts pure black. Primary coverts tipped white secondary wholly white, forming a very large wing patch. The white spots on both webs of the alars are arranged thus:

| Primaries. Inner web. | 1st 2 | 2nd 3 | 3rd 3 | $rac{4	ext{th}}{4}$ | 5	h | $_{4}^{6\mathrm{th}}$ | all the rest. |
|-----------------------|---------|----------|----------|----------------------|---------|-----------------------|---------------|
| Outer web. | 1 | 5 | 6 tin | 6 | 6 te | 5 | 4 |

Tail coloured diagonally buff on 3 outer tail feathers, which have a subterminal black spot, and the two outer either with a narrow black bar or two spots. Both above and below the eye pure white, buffish on the ear-coverts and frontal band; white at base of lower mandible, becoming buff on lower throat, and pale ochre on breast and abdomen, much streaked with

black particularly so on former. A black band from base of lower mandible, down side of neck, fading into the streaks of the upper breast. Occiput and side of neck crimson extending round behind ear-coverts and crossing the black line from the gape forming a gorget in front. Under tail-coverts pale crimson.

It is called "Khupi woi ru" by the Anghámi Nágás.

161. Hypopicus hyperythrus, Vigors.

Naga Hills.

Wing black, the primary coverts tipped white and the primaries spotted on outer-web. Tail black, two outer feathers barred black at tip, the antepenultimate tipped brown and with a single white spot. Bill pale yellow beneath.

168. Mulleripicus pulverulentus, Temm.

Mr. Wm. Robert sent me this large form from the Garo Hills. Bill greenish grey, lower mandible pale at tip.

176. VENILIA PYRRHOTIS, Hodgs.

Naga Hills.

177. GECINULUS GRANTIA, McClelland.

3 and ♀ from Garo Hills.

The female wants the dull crimson on fore part of head and there is less yellow in the dull green of head and neck, the former in front is dull ochraceous.

201. Cuculus Poliocephalus, Latham.

This bird was very abundant at Shillong in the early summer months, and I obtained it in every phase of coloration from the intense rufous to the pure ashy. The peculiar loud call is heard all over the Pine forests and I observed that sometimes the bird when perching sat along the branch, after the manner of *Caprimulgus*.

205. HIEROCOCCYX VARIUS, Vahl.

Garo Hills.

211a. CHRYSOCOCCYX XANTHORHYNCHOS, Horsfd.

This lovely bird from Hill Tipperah was obtained there by Mr. Ross Mangles, by whom it was given to me.

212. Coccystes melanoleucos, Gmel.

Was rather a common bird at Shillong in June. I have often witnessed the noisy way in which the males chase the female and Blyth's description is very true; a female measured—

L. 12.6," W. 5.9," T. 7.25," t. 1.15," Bf. 0.8;" irides very dark brown, legs pale plumbeous. The contents of the stomach of this bird were 3 of the large hairy caterpillars (3½ inches long) so common on the grass-lands in the Khasi Hills. This female had at least 10 eggs in ovary, which presented no very great difference of gradation in size. The cæca were 0.95" in length, intestine 11.5."

213. COCCYSTES COROMANDUS, Lin.

I have received this bird from the Garo Hills and from Hill Tipperah.

227. ÆTHOPYGA GOULDIÆ, Vigors.

3 obtained at Mezimih, Naga Hills, at head of the Lanier River, at 6000 feet. L. 5.8." W. 2.08," T. 3.18, t. 0.55," Bf. 0.58." It has a steel blue spot below the ear-coverts not noticed by Jerdon. The crimson extends over the eye as a supercilium and the lores are black.

228. ÆTHOPYGA IGNICAUDA, Hodg.

This was rather a common bird in the Naga Hills at 5000 feet in January; generally seen in vicinity of the villages, in its winter dress. In my specimen the breast is not dashed with red at all, being quite plain orange yellow towards abdomen, and the female has no red about her at all. My female specimen has a slight trace of red just appearing on the feathers of the nape and back of neck. I fancy they ascend to breed about 9000 feet. Saturata was common at that altitude in April.

237. DICÆUM CHRYSORHŒUM, Temm.

On the Samaguting ridge, *Nectarinidæ* were very common in the winter months, and I obtained this comparatively rare bird near the station in December. The irides are bright red, legs black.

L. 3.9," W. 2 3," T. 1.4," t. 0.52," Bf. 0.4."

233a. LEPTOCOMA HASSELTI, Temminck.

From Hill Tipperah; added to my collection by Mr. Ross Mangles, B. C. S.

242. Pachyglossa melanoxantha, Hodgson.

Shot at Sopvomah, Naga Hills, in December.

I was fortunate in discovering this curious form so far to the east-ward in a new locality, it having been hitherto only known from Nipal and, I think, Ceylon. Jerdon says that the upper tail-coverts are green, in my specimen they are concolorous with the back. The irides are red and the legs dark plumbeous. Bill black.

Wing 2.9," T. 1.8," t. 0.6," Bf. 0.3."

Description. Above, all dull dusky grey, tail darker and brighter. Wing black, the secondaries sepia-brown. Sides of head same as the back. A white streak extends from base of bill down the centre of throat, some white about the sides of breast. Lower breast, abdomen, and under tail-coverts bright yellow. The two outer tail-feathers with a white spot on inner web close to the tip. Inside wing white.

244. CERTHIA NIPALENSIS, Hodgs.

A single specimen from the Naga Hills.

248a. SITTA NAGAENSIS, Godwin-Austen, Plate IV.

Was first noticed at Sopvomah in the Nágá Hills last winter and I obtained several specimens on the watershed at about 6000 feet. It has been described by me in the P. Z. S., 1874. I give a drawing and description.

Description. Above slaty blue, wings and centre tail feathers same colour but paler. Quills dull pale black. A black streak through lores extending to ear-coverts and down side of neck. Beneath dull dirty white, purer on chin and throat, with a few white feathers bounding the ear-coverts. Flanks thighs and under tail-coverts dark rusty chesnut, all the latter with a terminal white spot. Outer tail feathers black, a white patch on inner web of the three outer, which are tipped grey and terminally black on outer web, white on middle portion of the outer web of the outermost tail feather.

Bill black above, grey below. Irides dark brown; legs green black. L. 4.9," W. 3·0," T. 1·75," t. 0·68," Bf. 0·58." spread of foot 1·2."

260a. Lanius collurioides, Lesson = hypoleucos, Blyth.

Found in the Iril valley, Munipur, in February and March, rare; this and L. tephronotus were the only Shrikes seen in Munipur. L. 7.5," W. 3.5," T. 3.8," t. 1.0," Bf. 0.58."

286. Chibia hottentota, Lin.

Garo and Khasi Hills.

289. TCHITREA AFFINIS, A. Hay.

Samaguting, April. 3 in full plumage.

L. 8·5," W. 3·6," T. 11·25," t. 0·58," Bf. 0·65."

310. Muscicapula superciliaris, Jerdon.

Young agrees with a drawing by Dr. Jerdon of the above in immature plumage; my specimen is from the Naga Hills.

331. Muscicapula estigma, Hodgs.

Dr. Jerdon had told me that he obtained this rare Fly-catcher in the isolated dense patches of forest, on the north side of Shillong Peak in the

[No. 3,

Khasi Hills; on my return to Shillong I looked for and found it tolerably numerous, getting some 8 specimens in May and June.

& Description. Above, side of neck, and upper breast cyaneous blue; wings and tail are black edged with same. A narrowish white line from base of lower bill to breast, which, with abdomen and under tail-coverts, is pure white; legs dark brown; bill black.

L. 4.5," W. 2.4," T. 1.78,' t. 0.6," Bf. 0.42."

I did not obtain a female, but it would appear, from a drawing by Dr. Jerdon, to be dull olivaceous above with white throat and breast.

323a. Erythrosterna sordida, n. sp.

Three specimens of this bird were shot under Japvo Peak in January; having failed to identify it, I believe it to be undescribed.

Description. Above dull olivaceous brown, ochraceous on rump and upper tail-feathers. Tail umber-brown slightly tinged with ochre on outer web. Quills same as tail and pale-edged. The primary and secondary coverts very slightly tipped pale so as to form an inconspicuous bar on the wing. A pale ring round eye. Lores and ear-coverts dull grey with a rufous tinge. Beneath dull lutescent, darker on flanks. Centre of abdomen and under tail-coverts white.

L. 5.25," W. 2.6," T. 2.4," t. 0.5," Bf. 0.23." It is somewhat similar to E. leucura but the white basal half of the tail feathers in this last-named bird distinguishes it at once.

322. SIPHIA ERYTHRACA, Blyth and Jerdon.

This rare bird occurred under Japvo Peak, Naga Hills, at 6000 feet.

L. 5.0," W. 2.85," T. 2.2," $t.\,0.6$," Bf. 0.35." A single specimen was procured by Jerdon at Darjeeling.

325. ERYTHROSTERNA ACORNAUS, Hodg.

I have this sombre coloured grey Fly-catcher from the Ihang valley in Munipur and from Shillong in the Khasi Hills; the specimen from the former locality measures, L. 4.0," W. 2.2," T. 1.6," t. 0.58," Bf. 0.33."

326. ERYTHROSTERNA MACULATA, Tickell.

Obtained in the Naga Hills by Mr. Wm. Robert, extending its range considerably to the eastward.

346. PITTA CUCULLATA, Hartlaub.

Given to me among other specimens from the Tipperah Hills by Mr. Ross Mangles. It is worthy of remark that now after 3 years of collecting I have never seen a *Pitta* on or near the northern range of hills south of the Brahmaputra (commencing with the Garos, and thence to the eastward) save the

large dull coloured form of Ground Thrush, Hydrornis Nipalensis of Hodgson, which occurs on the Burrail range.

346u. PITTA CYANEA, Blyth.

Given to me by Mr. Chennell of the Topographical Survey, who obtained it in Hill Tipperah. It is one of the most beautiful of these richly coloured Ground Thrushes.

366. Planesticus fuscatus, Pall.

This bird, which agrees well with Jerdon's description, I shot on the Peak of Japvo, the highest point of the Burrail range just under 10,000 feet, during some hard weather in the early part of January; only one specimen was secured.

Description. Above umber-brown darker on the head, the feathers dark centered; rump ferruginous. Wing and tail dusky brown, coverts and secondaries edged pale rufous; a well-marked supercilium white, becoming broader behind the eye. Lores dark brown, ear-coverts the same but lighter. A rufous tinge on lower side of the neek; chin and throat sullied white, with an indistinct stripe, commencing as spots, extending from base of bill, down side of neek, and round to the ear-coverts. A gorget on breast grey brown, with rufous tinge near shoulder of wing and spotted with dark umber. Lower breast and belly pure white; under tail-coverts pinky ferruginous and pale tipped. Flanks and thighs tinged rufous the former spotted brown. Under wing-coverts rich ferruginous. The inside of quills grey.

Length 8.5," Tail 3.4," t. 1.3," Bf. 0.62." Irides dark brown; bill

black above, dull yellow below; legs dull brown.

This bird much resembles *G. unicolor*, but is not so plainly coloured on the back.

373a. PARADOXORNIS AUSTENI, n. sp., Gould.

At Kuchai in the Naga Hills, at about 6000 feet elevation, in April, I obtained two specimens of this bird; I afterwards procured three at Shillong in the summer. They differed so much from my original specimens of P. flavirostris shot in the low marshy country at the base of the hills that I was inclined to consider them distinct. Mr. Gould, to whom I shewed these specimens and who had figured P. flavirostris from the original specimens sent home, pronounced them to be new to him, and has described and figured the species in the 'Birds of Asia,' under the above title. Not having his description, I will only mention that the chief points of difference lie in the pale nearly white colour of the under parts, the paler brown of the back, and a markedly different distribution of the black on side of head and breast.

My specimens measured—

L. 7.8," W. 3.3," T. 4.1," t. 1.05," Bf. 0.67," Bg. 0.4;" which dimensions are smaller than those of *P. flavirostris*.

Legs plumbeous with a slight tinge of green; bill yellow.

385. PYCTORHIS SINENSIS, Gmel.

This Babbler is very common in Munipur; dimensions of a specimen were:

L. 7.0," W. 2.6," T. 3.9" t. 1.05," Bf. 0.48."

390b. Turdinus Garoensis, n. sp., Plate VIII.

Above pale rufescent brown, rather richer on head, wings, and tail; feathers of head pale-shafted. Beneath, all pale fulvous, and whitish on abdomen.

L. 4.5;" W. 2.4;" T. 2.1;" t. 1.0;" Bf. 0.5."

Bill is brown above, pale ochre below, legs pale corneous. Tarsus and claws strong, the hind toe and claw long. It was among the birds collected by Mr. Wm. Robert in the Garo Hills, to whom is due the credit of its discovery.

This bird is very similar in coloration to *T. Abbotti*; but the bill differs much in the form of the nostrils, which have, as in *Pnoepyga*, a lunular cover. This and *Turdinus brevicaudatus* would be, perhaps, better placed after *Pnoepyga*, with which they are closely linked through *Pnoepyga longicaudata*.

400. Pomatorhinus ruficollis, Hodg.

This is the most abundant form of the genus in the Naga Hills, loving the damp shady sides of the forest-clad hills. It is called by the Anghami Nagas "Moh mera." In coloration it is very close to P. leucogaster, Gould, but is much smaller. I give a description with measurements.

Above, olive green rather rusty on back of neck, head darker, tail uniform with back and distinctly barred. A white supercilium, 1.6 inches in length, extends from base of bill to far back on neck. Lores and ear-coverts black, a rufous patch on side of neck behind the latter. Wings coloured like back and tail. Throat pure white sullied on breast with a few pale brown streaks. Flanks, abdomen, and under tail-coverts pale olivaceous; inside of wing grey. Bill yellow; irides red-brown; legs yellowish grey.

L. 7·25," W. 3·0," T. 3·4," t. 1·09," Bf. 0·8."

408. GARRULAX CERULATUS, Hodg.

This would appear to be a rather common Laughing Thrush in the Naga Hills; and I saw specimens that had been caught by bird-lime, the natives then still further spoil them by pulling out the quills and tail-feathers. Jerdon does not mention the grey on lower part of the ear-covert

which forms a pale spot; nude space round the eye dark grey, and a rufous patch from base of bill to under the eye.

L. 10.5," W. 4.0," T. 4.75," t. 1.6," Bf. 0.90."

409c. Garrulax Albosuperciliaris, Godwin-Austen, Plate VI.

Described in the P. Z. S. for 1874 as follows: "Above head and forehead reddish umber-brown paling on back of neck into dull olivaceous brown of the rump and whole of the wing; tail pale red brown; lores, a patch below eye, under ear-coverts, and supercilium which extends backwards for $1\frac{1}{2}$ inches from the lores, white; upper portion of ear-coverts dark brown; chin and throat ruddy brown, paling on the breast into very pale dingy olivaceous, and into pale earthy ochre on abdomen and flanks; under tail-coverts rufous."

Bill black; legs fleshy brown; irides dull red.

Length 9.0," W. 3.8," T. 4.2," t. 1.38," bill at front 0.7."

One specimen obtained in the Munipur valley, near Kaibi.

This dull coloured *Garrulax* is very similar in coloration to *G. rufifrons*, Sw., from Java, which is a larger bird and has no white supercilium nor white lower ear-coverts. Another similar form is *P. cinereifrons*, Blyth, from Ceylon.

409b. GARRULAX GALBANUS, Godwin-Austen.

Figured and described in P. Z. S. for 1874 as follows: "Above pale pure olivaceous on head, with a brown tinge on the back; tail pale ashy-brown, the four central feathers tipped umber brown and barred, the four outer of the same colour in middle and broadly tipped with white; wing concolorous with back; quills pale umber brown edged grey. Very narrow frontal band, base of lower mandible, lores through eyes and ear coverts rich black; beneath dull yellow, purer on the throat passing into the olivaceous on the flanks; under tail-coverts white. Bill black; legs ash grey; irides red brown."

L. 9·0," W. 3·65," T. 4·1," t. 1·35," Bf. 0·8."

I first obtained this very handsome bird in the Munipur valley under the Koupru range, in February 1873. It associates in large flocks of from fifty to eighty or more, very noisy, following each other in a long string through the high grass, which they seem to frequent and prefer to the denser forest. When on the flight the white of their tail-feathers and under tail-coverts makes them very conspicuous. I observed it, also, on the head waters of the Barak and other streams that flow into the Munipur valley on the north-east. The nearest allied species is *G. gularis*, McClelland, which is also yellow on the breast; but is dark slate grey above, with rufous on upper tail-coverts, flanks, abdomen, and vent.

413a. GARRULAX MERULINUS, Blyth.

This fine dull plumaged bird was obtained at the head of the Thobal valley in March; it presents a good deal the character of *Trichastoma Abbotti* in its coloration, and approaches *Turdus* in the spotted breast. No description being included in Jerdon's 'Birds of India' I give one here. It was described by Blyth (J. A. S. B., Vol. XX., p. 521 for 1851) from Cherrapoonjee.

Above umber with a rufescent tinge, head darker brown; wings and tail dark brown, both plain, the former having no pale edges. Forehead pale grey, a very narrow short white streak above the ear-coverts, commencing just behind the eye. Beneath dull pale rufescent ochre, the throat and upper breast spotted dull black, each feather having the black spot at the central extremity. Under tail-coverts rusty. Inside of wing and underside of tail feathers grey. Tarsus very strong. Bill thick and blunt, grey horny. Legs dull fleshy purple. Irides pale reddish brown, nude skin round the eye grey.

In Anghami Naga "Moh mépeh."

418a. TROCHALOPTERON CINERACEUM, Godwin-Austen.

Described in the P. Z. S. for 1874, with plate.

Above pale ashy olivaceous, greyer on the tail which is black for 0.7 inches at the terminal end, then tipped broadly white. Quills pale black, edged hoary grey; the secondaries tipped black, and their square tips edged white in keeping with the tail. Primary coverts near the bastard wing black forming a wing spot. Top of head black, extending in a narrow line down back of neck; lores and a broad band over eyes and ear-coverts dingy white; a few pure white feathers below eyes merging into ear-coverts; a narrow black line extends from posterior corner of eye over the ear-coverts and a moustachial streak of the same colour merges into indistinct spots. Chin white with a few black streaks; breast and under parts sullied white with a slight vinous tinge on the former and a dash of ruddy rufous on side of the neck, ochraceous on belly and under tail-coverts.

Bill pale yellow shaded dark above; legs fleshy brown; irides pale ruddy ochre.

Length 8.75", W. 3.22", T. 4.0", t. 1.25", Bf. 0.68".

In general style of coloration this bird approaches *T. variegatun*, Vigors. Its yellow bill and much smaller, weaker legs and feet, make it a very marked form of this genus.

Anghami Nagas call it "Lèhú."

426a. TROCHALOPTERON VIRGATUM, Godwin-Austen.

Described in P. Z. S., for 1874, as follows:

Head dark rufous brown, olivaceous on back, paler and greyer on rump; tail olive brown, with a slight tinge of rusty on basal half, finely and indistinctly barred; wing, three first quills grey on outer web, the rest and secondaries pale ferruginous, merging into rich chesnut at their base; coverts of the latter colour, narrowly tipped ochre, feathers of the winglet conspicuously white centred. Lores chesnut, a white supercilium; ear coverts pale rusty; chin and throat rich dark chesnut; breast and abdomen bright ochraceous; under tail-coverts darker brown. As viewed from below, the tail is grey brown, each feather faintly tipped with white.

All the feathers of the head, upper back flanks, and breast are centred white or pale ochre, and those of head and neck are rigid.

Bill black; legs pinky grey; irides pale brown.

L. 9.0", W. 3.5", T. 4.85", t. 1.3", Bf. 0.6".

I obtained a single specimen near the village of Rázámi under the Kopamedza ridge at 5,000 feet in Naga Hills in the month of January. Starting just after sunrise for the peak above the village, I observed first one and then another bird, not familiar to me, cross the path in front into some thick scrub. In this we could only perceive their whereabouts now and then by the moving twigs. Followed about, they became separated and the specimen in my collection got into a low tree where it uttered a very sweet call of a few notes, which was answered by its mate; my Shikari then managed to get sight of it and shot it. I never saw the species again.

This strikingly plumaged bird is very close to *T. setafer*, Hodgson, with which I have compared it, but it differs materially. *T. lineatum*, Vigors, is another allied form which extends to the N. W. Himalayah while *setafer* is from Nipal and Bhutan.

427a. ACTINODURA WALDENI, Godwin-Austen.

Described P. Z. S. for 1874, with figure by Smit., it is thus described.

Head full crested, extending back for more than an inch, hairy grey edged pale; back rich brown, with a greenish hue, becoming more rufous on the rump and upper tail-coverts; base of tail feathers chesnut, for half their length narrowly barred with black, then black for terminal inch, the three outer tipped white; quills black, outer web chesnut at base, then barred with black, and the narrow terminal portion grey; primary coverts black, the winglet feathers grey, barred black; ear coverts hoary; side of head hair grey; chin, breast, and abdomen rufous brown, paler on chin and throat, the whole having a streaky appearance, the feathers being centered with a darker shade.

Bill grey; legs and feet fleshy brown; irides pale grey.

L. 8.0", W. 3.48", T. 3.45", t. 1.2", Bf. 0.62".

I first shot this bird on the peak of Japvo at about 9000 feet on the Burrail range, Naga Hills. It keeps to the tops of the forest trees.

This is a small form of A. Egertoni, Gould, which occurs in the same locality; every character is repeated in the two forms, modified yet each distinct; no better example of gradual change in size and coloration could well be found.

430b. Sibia pulchella, Godwin-Austen, Pl. VII.

I shot two specimens only of this new and beautiful subdued coloured Sibia in April 1873, when making the ascent of the Peak of Khunho, Eastern Burrail range, Naga Hills, at about 8000 feet. In companies of about half a dozen, they haunted the tops of the Rhododendron trees, busily searching for insects in the flowers, and covering their foreheads and throats with the pollen.

I described it in the 'Annals and Mag. of Nat. History,' February, 1874, as follows.

Description. Above ashy grey, bluer on the head, the two centre tail feathers umber-brown terminating (each colour $\frac{3}{4}$ inch) in rich black, followed sharply by dark grey. The outer tail feathers are tipped in like manner with grey, but the black increases on each feather outwards, and on the last extends to its base. Shoulders of wing blue grey, with a bar of pale chocolate-brown coming in at the base of the black primary and secondary coverts. Quills grey-black, the primaries edged pale hoary blue; the secondaries blue grey, the last three are umber brown and the two last are edged narrowly on outer web with black. A narrow frontal band and lores black extending both over and below the eye to base of the ear-coverts. Beneath ashy blue with a vinous brown tinge upon the lower breast and abdomen. Bill black; legs horny brown; irides?

Length 9.5", W. 4.1", T. 4.85", t. 1.3", Bf. 0.75".

In the general distribution of the coloration and in form it resembles S. gracilis, which is extremely common in the same hills, but seldom met with above 6000 feet.

437a. Malacocircus (Layardia) robiginosus, Godwin-Austen, Pl. V.

I have described this in P. Z. S. for 1874: "Above rich rusty brown, darker on the head, with black shafts to the feathers; wings and tail of same colour, the latter distinctly barred; lores white, beneath pale rufescent, nearly white under chin, and pale on centre of abdomen.

Bill black, well curved; legs pale corneous or dull grey brown; irides nearly white.

L. 9.5", W. 3.0", T. 4.8", t. 1.6", Bf. 0.62".

The first two specimens of this bird I shot in long grass near the Logtak Lake, Munipur, and again obtained specimens near Kaibi in the same valley. It is essentially a grass-bird, with all the habits of *M. terricolor*, Hodgson. It associates about a dozen together, flying through the grass, one after the other, in a scattered line, never abiding long in one place. A near ally of this bird, *M. subrufus* from Malabar, is not so intensely rufous, has no white on the throat, is greyish on the head, and has a yellow lower mandible.

538a. PRINIA RUFULA, Godwin-Austen, Pl. IX, Fig. 1.

Described in P. Z. S. for 1874. I copy the original description from that Journal. Above, head ashy brown, becoming more russet on back and pale rufous on rump and upper tail coverts; tail brown indistinctly barred, tipped white on the outer tail-feathers with a subterminal dark spot; wing dark brown, with pale rusty brown edgings to primaries and secondaries; lores, round eye and ear-coverts pale ash, below chin sullied white, greyer white on breast; ochraceous on abdomen; flanks and thighs pale brown.

Bill black, both above and below; legs pale corneous, with darker claws; irides ruddy ochre.

L. 4.75", W. 1.82", T. 2.4", t. 0.75", Bf. 0.4".

This species was common in the Naga Hills and Munipur, and replaces *Hodgsoni*, Blyth, on the Khasi Hills side. It is quite distinct from *P. gracilis*, Franklin, which has a marked pale rufous forehead, and can be distinguished at a glance from the former bird, which is remarkably ashy with dark ear-coverts.

539a. CISTICOLA MELANOCEPHALA, And.—RUFICOLLIS Walden, Pl. X, Fig. 1.

I obtained several specimens of this form in the Munipur Hills, where it appeared common in the grassy valleys at head of the Barak; some specimens do not shew the rufous on the neck so much as others. My specimens are identical with Lord Walden's from Assam, named by him ruficollis, but Dr. Anderson's title has priority.

539b. CISTICOLA MUNIPURENSIS, Godwin-Austen, Pl. IX, Fig. 2.

Described in P. Z. S. 1874; the original description follows.

"Above dark umber brown, feathers margined pale ochre on head, broader and more rufous on back; upper tail-coverts plain rufous brown, the feathers on nape are paler rufous and dark shafting is subdued; tail dark umber, the two centre feathers margined rufous brown, viewed from below tipped whitish, with subterminal dark spots; white on chin, throat, and centre of abdomen, rufescent on breast and flanks. Pale round eye.

Bill black above, pale beneath; legs fleshy brown. L. 4.25", W. 2.0", T. 1.65", t. 0.76", Bf. 0.40".

I obtained four specimens of this species on the reedy sides of the Logtak Lake, Munipur valley. It differs on comparison with *C. schænicola* (Pl. X, fig. 2) and *melanocephala*, which I also obtained, being intermediate in coloration, and may be known at once by the dark edging along

the shafts of the centre tail-feathers, which in *melanocephala* are wholly dark, and in *schænicola* are banded broadly rufous, terminating in black and white. It is very near *Cis. russica*, Wall., from the Island of Bouroo, Malay Archipelago, which is more rufous on the head and breast.

471a. ORIOLUS TENUIROSTRIS, Blyth.

Two specimens were shot by my collector in a thick wood near Lumlangtong or Bishunpur, Munipur, on the 18th February.

& L. 10.0", W. 5.8", T. 3.65", t. 1.0", Bf. 1.2".

481. PRATINCOLA CAPRATA, Lin.

Q In open grass of Munipur valley, in February; may be known at once from *Indica* and *leucura* by its rufous upper tail-coverts.

500, RUTICILLA AUROREA, Pallas.

This Redstart was numerous in the stubble of the rice-fields bordering the Barak valley near its sources in the Naga Hills, during the month of January.

531a. ORTHOTOMUS FLAVOVIRIDIS, Moore, = EDELA apud Blyth.

The common Malaccan Tailor-bird, I met with in the forest of the Dunsiri near Dimapur, and it agrees well with Malayan specimens. The bill alone being rather shorter and more slender.

The discovery of this bird in Assam extends its range considerably.

W. 1.85", T. 1.70", t. 0.70", Bf. 0.60".

I also got it at the base of the Garo Hills near Shushang, so that it, no doubt, extends all through Tipperah, Arracan, &c.

538. PRINIA HODGSONI, Blyth.

This little Wren-warbler is common enough in the hills about Shillong.

Jerdon's description being short, I give that of the Khasi form in more detail.

Description. Above ashy brown, greyer on head, tail pale brown indistinctly barred, with black subterminal spots and white tipped. Wings pale brown edged pale rufescent. Pure white on chin, grey on throat and breast and white on abdomen and under tail-coverts. Some specimens have a faint tinge of ochre on the flanks and thighs. Orbits brown, irides orange ochre. Bill black above and below, legs yellow brown.

L. 4.35", W. 18.2, T 2.15", t. 0.68", Bf. 0.4".

538b. PRINIA RUFESCENS, Blyth.

This bird agrees with specimens of *P. rufescens* from upper Burmah collected by Dr. Anderson when on the Yunan Mission, but it is somewhat larger and more intensely rufous.

W. 1.85, T. 2.55, t. 0.9", Bf. 0.4".

542. Graminicola Bengalensis, Jerdon.

This bird is not easy to bag, it shifts about through the grass seldom rising, and if once scared gets low down near the ground and hides. I obtained one specimen at the head of the Barak valley, Munipur.

548. SUYA FULIGINOSA, Hodgson.

Is quite distinct from S. atrogularis, and I obtained several specimens at Shillong.

Bill above black, beneath palish, legs pale flesh, feet brown. Lores and supercilium pale. Irides ochre, tarsus stout.

L. 6.4", W. 2.0", T. 3.27 to 4.4, t. 0.8", Bf. 0.42.

Suya atrogularis, Moore, its nearest ally, has the bill black above, dark horny below, legs orange fleshy, irides pale ochre, white on upper margin of eye and a few of the dark ashy feathers of the supercilium tipped white.

552a. NEORNIS ASSIMILIS, Hodgson.

I shot this bird both in the Naga Hills and at Shillong; it is Blyth's *Drymæca brevicauda*. As it is a bird little known, a description here may be useful.

Above brownish olivaceous, tail umber brown and rather more rusty brown on wing, pale line through lores over eye. Below dusky whity brown, paler on chin. A pale ring round eye, and a slight tinge of yellow on inside of shoulder of wing.

L. 4.75", W. 2.1", T. 2.3", t. 0.8", Bf. 0.38".

568. REGULOIDES EROCHROA, Hodgson.

Naga Hills. February.

568a. Reguloides fulvoventer, n. sp.

Above centre of head, light yellow green bounded on either side by broad dusky bands; and nape pale greenish ash. Pure ash on back, upper tail-coverts grass green as well as the two central tail feathers and outer edge of all the others. The two outermost as viewed from below have a narrow pale yellow edging on outer web. Shoulder of wing ash grey, coverts ash brown with a narrow white bar. Quills dusky brown, the secondaries well marked with grass green. A pale yellow supercilium. Ear-coverts pale, chin very pale yellow; throat, breast, and abdomen pale pearly white, under tail-coverts bright yellow.

L. about 3.75", W. 2.0", T. 1.4, t. 0.70", Bf. 0.4".

Bill above dark brown, below orange; legs and feet grey. This Warbler is so distinct from any I have been able to look over, that I think it is a distinct species. I obtained it when in the low country of the Dunsiri, Assam.

566. REGULOIDES CHLORONOTUS, var. Hodgson.

This form was very common in the opener forests on the slopes of the Burrail range.

W. 1.85", T. 1.35", t. 0.7", Bf. 0.25".

It is very similar to *chloronotus*, but the band on rump in my three skins is nearly white.

574. ABRORNIS FLAVIVENTRIS, Jerdon.

From the Garo Hills; one specimen only.

578. ABRORNIS CASTANEOCEPS, Hodgson.

This pretty little Abrornis I saw several times in the Naga Hills when the forest was pretty open, and I shot a specimen at the head of the Iril valley in Munipur; I believe it has only been previously procured in Nipal and Sikkim.

Description. Crown of head dark chesnut with some darker feathers towards nape, which is dark ash. Back grassy green, upper tail-coverts pale yellow; centre tail feathers pale dusky brown, the two outer white with a dusky edging on the terminal $\frac{2}{3}$ rds. of their length. Wing grass green, the coverts tipped yellow forming one distinct and lower band and one indistinct upper one. Beneath, chin and breast bluish white. Flanks, inside shoulder of wing, belly and under tail-coverts canary-yellow. Bill above dark brown, below orange; legs olive brown.

L. 3.6", W. 1.95", T. 1.6", t. 0.66", Bf. 0.29".

588a. ENICURUS LECHENAULTII, Temm. = CHINENSIS, Gould.

This bird was given to me by Capt. Badgley of the Topographical Survey, who shot it in the Lushai Hills in company with *G. immaculatus*. Obtaining this species in this locality so far west is very interesting, and marks its extreme limit on the Indian side.

Length about 10", W. 4.2", T. 5.8", t. 1.28", Bf. 0.9".

The measurements of the Hill Tipperah *E. immaculatus*, Hodgson, are—Length about S", W. 3·6", T. 4·9", t. 1·1", Bf. 0·61".

589. MOTACILLA MADERASPATANA, Briss.

On the upper Barak river, in February, a pair were shot.

595. NEMORICOLA INDICA, Gmel.

Shillong, Khasi Hills.

614. LEIOTHRIX LUTEUS, Scopoli.

Shillong, Khasi Hills.

It is not so common on these hills as L. argentauris, and I seldom came across it.

618. MINLA IGNOTINCTA, Hodgson.

Was very numerous in the woods about Sikhamih, Naga Hills, in January.

622. Proparus vinipectus, Hodg.

This "Plain brown hill Tit" was only seen on the highest part of the Burrail range on Japvo Peak, about 9,000 feet.

Bill black, irides pale ochre, legs and feet pale umber-grey.

L. 4.5", W. 2.2", T. 2.1", t. 0.9", Bf. 0.3".

624. IXULUS CASTANICEPS, Horsfield.

This is not an uncommon bird in the Naga Hills east of the Burrail at 5—6,000 feet, and as there is no description of it in Jerdon I give one here. Above dark olivaceous, tail brown, forehead rufous merging into the olivaceous brown of the top of head. Wing umber-brown. A white supercilium from above eye extending to the neck, fading into some streaky buff and black feathers behind the ear-coverts. A black band borders the white above. Lores and ear-coverts sooty. Chin, throat, and upper breast buffy white, sullied white on abdomen, flanks olivaceous. Irides dark red-brown; legs and feet pale fleshy. Bill grey-brown, feathers of head scale-like,

L. 5.58", W. 2.2", T. 2.5", t. 0.95", Bf. 0.45".

628. Yuhina nigrimentum, Hodg.

Sent to me by Mr. Robert from the Naga Hills.

632. Sylviparus modestus, Burton.

This very small form of Tit was numerous, in April, on the high parts of the Eastern Burrail range, just under the peaks of Japvo and Khunho, in small parties together. It moves rapidly and actively about the upper branches, and round and up perpendicular branches like Sasia, which its long hind-toe enables it to do. It was busy feeding about the Rhododendrons then in bloom.

The tips of the secondary coverts are pale, forming an inconspicuous band on wing; feathers of the head rather stiff, broad, and long, nearly hiding the bright yellow supercilium.

L. 3.5", W. 2.3", T. 1.5", t. 0.58".

634. ŒGITHALISCUS ERYTHROCEPHALUS, Vigors.

Legs orange, irides yellow-ochre or yellow.

W. 1.87', T. 2.05", t. 0.6", Bf. 0.2".

Naga Hills, several specimens obtained near Kohimah in January.

644. PARUS MONTICOLUS, Vigors.

Common enough in the Naga Hills.

The outer web of the outer tail-feather is white.

660. Corvus culminatus, Sykes.

Shot in the Naga Hills, the only Crow seen there, and at Sopvomah was extremely numerous in January, associating together in large flocks.

672a. UROCISSA MAGNIROSTRIS, Blyth.

Shot at Sikhami, Naga Hills, at 5,000 feet, in February.

L. 26", W. 7.4", T. 17", t. 2.15", Bf. 1.46".

Irides dark brown, bill and legs orange red. Primaries dull cobalt-blue.

691. Saraglossa spiloptera, Vigors.

Both 3 and 2 received from Garo Hills from Mr. W. Robert.

699a. Munia subundulata, Godwin-Austen.

Described in P. Z. S. for 1874.

"&. Above pale umber-brown, darker on the head, pale grey on rump, a few feathers edged paler; the upper tail-coverts dull yellow; tail-feathers olivaceous umber-brown, faintly edged with same yellow tint; quills pale chesnut on outer web, umber-brown on the inner, and indistinctly barred. Sides of head umber-brown becoming dark chesnut on chin and throat; breast and flanks white, feathers very narrowly barred or margined rufous-brown; abdomen and under tail-coverts dull white, the latter sparingly streaked with brown; feathers of the back finely pale-shafted,"

Bill dark grey; feet plumbeous; irides red.

L. 4.3", W. 2.10", T. 1.70", t. 0.55", Bf. 0.45".

q is a duller brown above, with no white shafts to the feathers, a distinct green tinge upon the tail feathers, otherwise as in M. undulata.

Change of coloration in young males commences on the centre of the throat, extending towards the base of bill into the dark chesnut, and towards the breast into the undulated colouring of those parts.

Obtained in the Munipur valley, both on the Logtak Lake and head of the Barak river. It is a very close to, but distinct from *M. undulata*, Latham, in which the undulations are broad, the general coloration is more rufous, and the tail more pointed. It is also close and intermediate to *M. nisoria* from Java and Malacca; but in that bird the tail-coverts are grey, with no trace of the fulvescent tinge common to the two continental forms. Lord Walden was the first to notice it as distinct, in specimens in his collection received from Burmah which are identical with my own from Munipur, and he kindly allowed me to describe it.

703. MUNIA MALABARICA, Lin.

Specimens were obtained at Kooshtia, in November.

708. PASSER CINNAMOMEUS, Gould.

Under Burrail range, Naga Hills; not often seen. At Shillong it is commoner.

L. 5.2", W. 2.63", T. 1.98", t. 0.68, Bf. 0.42".

710. Passer montanus, Lin.

Garo and Khasi Hills.

719. Emberiza fucata, Pallas.

This bird from head of the Barak valley differs from Jerdon's description in colour of legs and feet, which have no tinge of yellow, being a dull flesh-colour. The outer tail-feather is white on basal end, extending as a diagonal bar through inner to the outer web; the penultimate is tipped white on inner web. Centre tail-feathers rufous with black centre, and the rump is rufescent with small black streaks.

L. 6.45, W. 2.9", T. 2.62", t. 0.85", Bf. 0.42".

724. MELOPHUS MELANICTERUS, Gmelin.

During February and March, this handsome Bunting was very numerous in the high grass skirting the river Iril, Munipur valley, particularly about Kaibi.

& L. 6.5", W. 3.35", T. 2.85", t. 0.75", Bf. 0.48".

762. ALAUDALA RAYTAL, Buch. Hamilton.

Occurs abundantly on the sandy churs of the Brahmaputra, and I shot it near Gwalpara, in November.

L. 5.25", W. 3.35", T. 2.0", t. 0.75", Bf. 0.40".

On the same churs, among low bushes, *Pratincola leucura* was very common; *Cotyle sinensis* and *Prinia flaviventris* were also procured.

771. TRERON NIPALENSIS, Hodgson.

I have compared my specimens with the above from Sumatra and Malacca, and they are identical. It was not uncommon in the Dunsiri forest between Dimapur and Golaghat, and I shot it again on the road to Shillong near Gowhatty. It does not appear to range above 1,000 feet.

ð measures L. 10", W. 5:55", T. 3:86', t. 0:83", Bf. 0:56".

782. Alsocomus puniceus, Tickell.

This beautiful Wood-pigeon was shot at the hot springs of the Namba on the Dunsiri river in April. These springs are saline and attract enormous numbers of Carpophagæ (insignis and sylvatica) to their waters to drink;

and when the above bird was picked up, a quantity of the saline water poured out of its mouth.

797. TURTUR HUMILIS, Temminck.

Garo Hills.

806a. CERIORNIS BLYTHII, Jerdon.

3 described in the J. A. S. B. 1870, p. 60.

This bird is very difficult to obtain, and I failed to get the female, which has never yet been seen by any European. I heard them in the forest on the ascent to Khunho, but although I offered 20 Rs. for a bird, the Nagas only once succeeded in getting one; this, a male, was snared near the village of Viswémah, but thinking that I wanted the feathers only, the natives had, to my utter disgust, picked and eaten it. Another male was brought to Captain Butler, the Political Agent of the Naga Hills, when passing through the village of Jotsomah (also under the Burrail range), but it had been skinned so badly that it was falling all to pieces and the most we could do was to save a few of the better pieces of the skin for the sake of the feathers. The Burrail range is the extreme western limit of this bird, and it has not been got even there, west of the peak of Paona, where the specimen in my collection was obtained by Mr. Wm. Robert, a most assiduous collector, whom I have to thank for very many good birds. Its haunts are in the dense forest from 6000 to 10,000 feet, and this renders it such a difficult bird to bag, and the only chance of shooting a specimen would be by coming upon it suddenly along a more open bit of ridge, or in one of the higher clearings. It was unknown to the Nagas of Asalu. It probably extends some distance to the eastward until it meets its near ally C. Caboti. Jerdon was the first to notice it in the 'Ibis' (1870, p. 147) from the Suddya Hills.

823a. Bambusicola Hopkinsoni, nov. sp., Godwin-Austen.

& Description. Above head plain dull brown, becoming rufous on back of neck, back dull olivaceous grey. The feathers of upper back and scapulars centered with dark chesnut, the secondary coverts more broadly so and terminated in black. The feathers of the back have one or more small white spots on the outer margin, giving the back a well-speckled appearance. The rump feathers are indistinctly barred white with a single black spot and increase in size to the upper tail-coverts where the spots are conspicuous, heart-shaped with chesnut centres. Quills ruddy chesnut, the secondaries and tertiaries mottled with dark brown. Tail ruddy-brown, feathers narrowly barred with pale ochre having dark mottled edgings. Lores pale buff extending as a supercilium; ear-coverts, chin, and upper throat pale ferruginous; a black streak extends from posterior margin of the eye down side of neck; from lower part of neck for a short distance the feathers are centred rufous with

pale spots on outer margin, rest of breast buff, lighter on abdomen and sides; barred on centre of breast and flanks with black, the barring not shewn but each feather has a terminal black heart-shaped spot, which is a conspicuous character.

Legs pale grey with green tinge; bill pale horny-black, pale beneath, irides dark brown.

L. 14.5," W. 6.25," T. 5.0," t. 1.2," Bf. 0.9."

Through the kindness of Dr. J. Anderson, I have examined a specimen of B. Fytchii 2 from the Yunan Hills, and with this the Khasi bird is evidently very closely allied, if indeed it should not turn out to be identical; but between my bird and B. Fytchii there are differences which, though perhaps small, separate them, and until birds of the same sex are placed side by side, we cannot well decide whether they are two good species or not. To begin the enumeration of the points of difference, the Yunan bird (A) is much smaller than the Khasi one (B):

- (A) B. Fytchii, t. 1.7," mid-toe 1.7".
- (B) B. Hopkinsoni, t. 2·1," ,, 2·1".

Other dimensions of (B.) L. 14.5," W. 6.25" T. 5" Bf. 0.9".

- In (B) the feathers on the flanks have the black terminal spot invariably heart-shaped, whereas in (A?) the corresponding feather is a diamond form (vide also the figure of 3 in P. Z. S., 1871, Pl. XI).
- In (A) the whole of the lower back is plain olivaceous with a few of the longest upper tail-coverts having a black triangular (isosceles-shaped) terminal spot followed by a white base.
- In (B) these spots are much larger and broader and extend up over the rump, and the feathers are more distinctly barred with brown and have a rufous tinge at the base.
- In (B), and I think this is the most important difference, all the feathers of the upper back are spotted with white, and this feature extends to the wing coverts and shoulder of wing. In (A) there is no tendency to this coloration nor is there any trace of it in the plate in the P. Z. S.
 - (A.) is dark brown on chin, (B.) very pale.
- (A.) tail not distinctly barred, (B.) tail well-barred and the pale bars edged with black.
 - (A.) tail beneath dull brown, (B.) tail ruddy brown.

However, whether they be separable or not, and a larger series will decide this, one important point is finding this bird so far to the westward, within Indian limits; it has never before been recorded. My specimen was shot at Shillong on grassy slopes at 5000 feet. Before I had seen the bird in hand, I had twice seen it running on the pathway and noticed its very different flight from that of the Black Partridge, which at first I thought it was. Now that attention is called to it, other specimens will no doubt turn up.

825b. Arboricola intermedia, Blyth.

In my 2nd list I recorded A. rufogularis, Blyth, from N. Cachar; this I now find, on obtaining another specimen in the Naga Hills, to be intermedia, originally described as probably from Arakan (J. A. S. B., XXIV, p. 377). But A. rufogularis will still remain on the list with a new locality, the Naga Hills, where Captain Butler obtained a 2, which at the time I could not make out from never having met with it before. Intermedia may be known at once by the plain, unbarred back and by the absence of the black separating the rufous of the neck from the grey of the breast; it is in front spotless, but has large round black spots on the side of neck. Dimensions of intermedia, Blyth, from Naga Hills:

W. 5.75," T. 2.6," t. 1.7," Bf. 0.7, mid-toe and -claw, 1.82."

Legs red. Bill black.

A. rufogularis, \$, from Naga Hills, legs pale fleshy violet, measures— W. 5·32," T. 2·5," t. 1·58," Bf. 0·5," mid-toe and -claw, 1·75."

I found the nest of Arboricola in the forest at the head of the Jhiri River, N. Cachar, constructed close in under the large root of a tree near the base; it was lined with dry leaves which then (March) strewed the ground and contained three eggs of a light brown colour.

833. Turnix ocellatus, Scop.

Shillong, Khasi Hills.

834. Turnix Dussumierii, Temm.

Naga Hills.

835. Turnix Sykesii, A. Smith.

Khasi Hills.

895. Totanus stagnatilis, Bechstein.

Munipur, in March.

908a. Porzana bicolor, Walden.

The original specimen, from which the description was made by Lord Walden, came from Darjiling. It was very interesting to find it again occurring in the Khasi Hills (June). I got it in a small piece of marshy ground in the station of Shillong, together with the species of *Porzana* that follow. Bill glaucous green with slight tinge of red near base of mandibles and tipped grey; irides crimson-red, orbits red; legs pale dullish vermillion.

L. 8.75," W. 4.4," T. 2.4," t. 1.5," Bf. 0.9."

Mid-toe and -claw, 1.75," hind-toe and -claw, 0.65."

Two specimens were brought to me alive by a Khasia with one egg, which he said was that of this bird; it measures 1.4" in major diameter,

1.0" in minor diameter, is of a creamy white colour, unspotted on the smaller end, distantly so on the lower $\frac{2}{3}$ rds., closely on the larger end, the spots all pale grey, with light and dark shades of sepia. The birds did not live long in confinement, although they are greedily of earthworms.

Captain Elwes tells me that he procured this bird in the interior of Sikkim, at Choongtam, at an elevation of 5000 feet, in September 1870; to him therefore belongs the credit of being the first to discover it. This specimen, with others, was lent by him to Mr. A. O. Hume for description, but the box containing them appears to have been lost on its way to Agra. Captain Elwes found this Rail in rice-fields which are the highest in Sikkim; my bird was found in similar ground, and at the same elevation.

911. Porzana fusca, Linnæus.

Obtained at Shillong in June.

L. 7.5," W. 4.0," T. 2.2," t. 1.35, Bf. 0.75."

Mid-toe and -claw 1.6". Bill dull dark green, orbits vermillion, irides orange, legs pale vermillion. The under tail-coverts are dark umber-grey in my specimen (not olivaceous as stated in Jerdon), and closely barred with white.

913. RALLUS STRIATUS, Linnæus.

Dimensions are smaller than those given in Jerdon; but the bird does not differ in coloration from specimens from the rest of India.

L. 9.5," W. 4.75," T. 20," t. 165," Bf. 1.4."

Mid-toe and-claw 1.8," hind-toe and-claw 0.62," irides sienna-brown, legs and feet ash-grey. Bill pink at base, pale grey-brown at tip, brown above.

The bill is much lengthened, and in the presence of a shield-like expansion at base above, approaches nearer to the Water Hens (Gallinula) than other Rails. The tarsus is very stout and the feet are shorter and stouter than in Porzana.

It occurred in the same swamp with the two preceding forms.

917. MYCTERIA AUSTRALIS, Shaw.

Bisnath, Assam; in December.

920. CICONIA LEUCOCEPHALA, Gmelin.

On Brahmaputra.

949. Anser indicus, Gmelin.

In large flocks on the Logtak Lake, in February; they leave the water to feed in the stubble of the rice-fields in the morning and evening.

955. CASARCA LEUCOPTERA, Blyth.

I got this bird at Dimapur on the Dunsiri River; it appears to prefer sluggish streams like this flowing through forest, for I once flushed this bird in such a haunt in the interior of the Garo Hills. I am informed by Mr. James of the Police at Samaguting that it breeds on the Dunsiri, and that he had shot the young birds. It is called the "Deo Hans" in Assam. Mr. J. Burt of Tezpur informs me that the white-winged Sheldrake perches on trees, and that one was killed thus sitting by Mr. J. Martin of Paniputa Tea plantation near Tezpur.

The habits and haunts of this species are as completely the reverse of

its congeners rutila &c. as they well can be.

962. DAFILA ACUTA, Lin.

Tolerably abundant on the Beels in Munipur, in February.

963. Mareca penelope, Linn.

Very numerous in Munipur, in February.

971. Fuligula cristata, Ray.

Munipur, on the Lamphel.

975. Podiceps Philippensis, Gmelin.

Beels, Munipur.

Anas pæcilorhyncha, Pennant was a very common duck on the Logtak Lake, in February. I have nowhere seen it so numerous.

General notes on other species.

The specimens of *Ephialtes* that I have hitherto procured in the Naga Hills and Asalu, are undoubtedly *lempigi*, Horsfield, like birds from Java, &c., of which the very rufous one mentioned in my first list is in that particular phase of plumage.

Micropternus phaioceps, Blyth.

I have two specimens in my possession, one of which is from the Tipperah Hills, the other from Dimapur, Assam; both are much darker and much more distinctly barred on back than others, and have at the same time stronger bills; and both are smeared all over the head, tail, and feet with some dark gummy substance that they are evidently fond of getting into.

Cyanops Asiatica, Lath.

I notice that all the specimens in my collection from these Eastern Hills, have a small triangular patch of scarlet (0.3" wide) at the gape, a point not noticed in any description I can find, nor is it shewn in the figure of this species in "The Marshalls" monograph of the Barbets,

Pl. 26. I pointed this out to Lord Walden, and having looked at his specimens from the N. W. Provinces and Nipal, found in them the slightest trace of a few very minute red feathers near the gape; these are so small that in a stuffed specimen they might be easily overlooked; in birds from Assam and Munipur this red spot is so well developed that it could not escape attention.

Eumyias melanops, Vigors.

Breeds in the Khasi Hills, on the Shillong or northern side, in April. Young birds well-fledged were brought in to me in the middle of May.

Harpactes Hodgsoni.

Two specimens of this species, from the Garo Hills, have the crown of the head whitish-grey mixed with pink and whitish towards the nape, in other respects they are identical with the above species. Are they in immature plumage?

Pomatorhinus McClellandi.

Birds from the Naga Hills, I notice, have a longer bill, and the spottings on the breast are darker and occasionally form a demi-collar.

I have received a specimen of Arachnechthra Asiatica, Latham (= carruvaria, Lin.) from Hill Tipperah, which I considered at first to be intermedia, Hume. However, on comparing it carefully with specimens from Candeish Gwalior, Manbhoom, Umbala, Lower Bengal, Garo Hills, and Tonghú, I can detect no difference whatever in coloration, and their bills run so close in size that I do not consider it a species that will stand,—certainly not on the very small and sole difference of a slightly longer bill. If such single characters are to be allowed weight, we should have species multiplied ad infinitum, and if the Tipperah form of A. Asiatica should be larger, it is sufficient to notice the peculiarity as a large variety, but why encumber nomenclature, when no other differences exist, with another name and create a new species.

A female Niltava in young plumage shot under the peak of Japvo, Naga Hills, in January, when it would nearly have arrived at maturity, differs so much from the dimensions of N. grandis (to which it is nearest in size) and N. sundara that I am inclined to consider it an intermediate new form. Females of grandis and sundara, irrespective of size, have a very similar coloration; the species I have before me, differs slightly from both, a difference it is not easy to explain in writing, and so often to be noticed in allied forms. The inside of the wing is pearly grey, and the tail is not so ruddy dark a brown as in grandis. A young grandis q in my collection, with the head still well spotted with pale rufous, closely equals in size birds in full plumage, with the greyer head and nape. My bird has no sign of the blue shoulder-spot, and the first primary

is proportionably much smaller and shorter than in undoubted young grandis. I give a full description so that the next collector visiting the Naga Hills may be on the look out for an intermediate form of Niltava, and if such there be, obtain the male.

Description. Niltava? ? Q of first year. Above olivaceous with an ochre tinge. Ashy on head, more rufous on upper tail-coverts. Tail ruddy dark brown. A pale ring round eyes, less conspicuous above than below, wing feathers closed, umber brown. Lores tinged pale rufous. Beneath chin pale rufous, with a few pale grey bars, breast to abdomen rufescent ashy, thighs pale ash-brown, a pale dull streak extends from chin to upper breast, ending suddenly, abdomen sordid white, under tail coverts pale ochre brown, darker centered and tipped pale, inside shoulder of wing dull ochre. Quills inside pearly-grey. Shot in underwood on ascent to Japvo peak January 1873, three were seen together. The bill is black, shorter and stouter than in grandis. Irides dark brown.

N. grandis. = L. -, W. 3.95", T. 3.9", t. 0.92", Bf. 0.52'. N. ? = L. 7.4" W. 3.9", T. 3.5", t. 0.78", Bf. 0.44".N. sundara. = L. - W. 3.1", T. 2.5', t. .80", Bf. 0.42".

Pnoepyga longicaudata, Moore.

Is very numerous in August in the large woods below the peak of Shillong, and I got several in that locality. There can be no doubt that the bird in Griffith's collection came from the north-east frontier, and not from Afghanistan. It is a shy bird keeping to the dense underwood. The irides are dark crimson.

358a. Turdulus pallens, Pallas.

Was frequently noticed in the Naga Hills, and I obtained a specimen on Japvo Peak, close under 10,000 feet, in January. They agree well with specimens in Lord Walden's collection.

Above pale umber-brown, a white supercilium extends to over the ear-coverts. Lores and ear-coverts dark umber. A white patch under eye, and white on chin extending down centre of throat to upper breast, very narrowly defined in some birds; side of throat first mottled with umber passing into two indistinct streaks on either side. Breast pale rufous-brown above, white below to abdomen. Under tail-coverts pure white. Flanks rusty; no rufous inside wing, which is all grey.

L. 9.0", W. 5.0", T. 3.6", t. 1.2", Bf. 0.7".

A nest of *Pycnonotus pygœus*, Hodg., brought in by my shikari at Shillong in June, contained 3 eggs of a pale madder ground, spotted and speckled with darker madder-brown, pale neutral grey, and a few dark brown spots,—all pretty evenly distributed.

The nest is 4 inches across, neatly made with a foundation of dry old leaves and broad blades of grass; the sides of thin stalks of a thistle and thin sticks, and lined within with very fine grass; taken in a low tree.

Spizixos canifrons breeds in the neighbourhood of Shillong, in May. Young birds are seen in June.

Enicurus nigrifrons of 1st List, Vol. XXXIX., Pt. II., p. 107, is E. maculatus, Vigors, in immature plumage.

584 of same list is, I find, guttatus, Gould, in which the white markings on the back are all circular, this would appear to replace maculatus in all these Eastern Hills, for I have never yet shot a specimen, like this last north-west form.

Up to March, when we left Munipur, I did not observe any Parrots or Hornbills in any part of the valley, or hills bounding it. The natives say that later in the season parrots are very numerous and do considerable injury to the crops. Of Swifts I saw only one, a large species, which I failed to secure. Cypselus infumatus, Sclater, occurred in the Naga villages, and was very numerous in the large one of Padhang. Pnoepyga must be rare, for I did not get a single skin anywhere in N. E. Munipur. The country gets much drier on that side and the forest less dense, with a good deal of grass. Buntings were very plentiful and Emberiza pusilla appeared everywhere to be the commonest bird in the Naga Hllls, at 3—5,000 feet.

In the pine forest that covers the slopes of the hills descending into the Umiam valley, one of my men marked a nest on June 25th; I proceeded to the spot soon after I had heard of it, and on coming up to the tree, a pine, saw the female fly off out of the head of it. But the nest was so well hidden by the boughs of the fir, that it was quite invisible from below. The bird after a short time came back, and I then saw it was Sibia gracilis, but was very shy and seeing us went off again, and hung about the trees at a distance of some 50 yards; while thus waiting, some 4 or 5 others were also seen. The female, however, would not venture back, and I sent one of my Goorkhas up, to cut off the head of the fir, nest and all, first taking out the eggs.* It contained three of a pale sea-green, with ash-brown streakings and blotchings all over.

The nest was constructed of dry grass, moss, and rootlets, and the green spinules of the fir were worked into it, fixing it most firmly in its place in the crown of the pine, where it was much forked.

Sibia has habits very like *Phyllornis*: they hang about the outer branches much in the same manner, and there is again a certain likeness in general coloration between *S. gracilis* and *Otocomptsa jocosa* barring the colored under tail-coverts of the last. However, in *Sibia* the form of

^{*} This nest is in the Indian Museum.

nostril is very different. I have heards gracilis rather noisy in the spring, uttering a loud single note, repeated three or four times in succession.

453a. Phyllornis Cochinchinensis.

Of 2nd List is *P. chlorocephalus*, Walden; I obtained another pair at Dimapur, on the Dunsiri River, in December.

It was described by Lord Walden from Burmah; its extreme known western range is, therefore, now the Garo Hills.

Trochalopteron Austeni, Jerdon.

Was bagged again near the eastern extension of the main water-shed, on Kopamedza Peak, at the same altitude as before. It has been beautifully figured by Gould in the 'Birds of Asia,' Plate 187.

Explanation of the Plates.

- Pl. IV. Sitta Nagaensis, Godwin-Austen, p. 157.
- Pl. V. Malacocircus (Layardia) robiginosus, Godwin-Austen, p. 164.
- Pl. VI. Garrulax albosuperciliaris, Godwin-Austen, p. 161.
- Pl. VII. Sibia pulchella, Godwin-Austen, p. 164.
- Pl. VIII. Turdinus Garoensis, n. sp., p. 160.
- Pl. IX. Fig. 1. Cisticola Munipurensis, Godwin-Austen, p. 165.
- —— Fig. 2. Prinia rufula, Godwin-Austen, p. 165.
- Pl. X. Fig. 1. Cisticola melanocephala, And., p. 165.
- Fig. 2. Cisticola schenicola, Bonap., p. 165.





J Smit hth

M&N Hanhart imp

LAYARDIA ROBIGINOSA





SIBIA PULCHELLA.



Smit lith

M&N. Hanhart imp

TURDINUS GAROENSIS



Godwin-Austen,del.

1.CISTICOLA MUNIPURENSIS Nat Size 2 PRINIA RUFULA

Machine & Macdonald imp.



Godwin-Austen, del.

1.CISTICOLA MELANOCEPHALA. Nat Size SCHÆNICOLA.

Maclure & Mac to Ma